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| 10/715,405      | 11/19/2003  | Jean-Francois Lafon  | 245515US41X CONT    | 5311             |

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| EXAMINER |
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TRAN, DALENA

|          |              |
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| ART UNIT | PAPER NUMBER |
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3661

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/715,405

Applicant(s)

LAFON ET AL.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This application has been examined. Claims 1-34 are pending.
2. The prior art submitted on 2/19/04 has been considered.
3. The copy of the foreign priority document has not been received. The document is required to be submitted.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,3,5-8,10-15,18,20-25, and 27-32, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141) in view of Snyder et al. (6,664,989).

As per claims 1 and 18, Briffe et al. disclose a dialog system for dialog between an operator of an aircraft and at least one system of the aircraft, comprising: a display configured to display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft (see column 3, lines 6-30; and column 4, line 66 to column 5, line 13), a first cursor control device (see column 5, lines 35-39), and a second cursor control device (see column 5, lines 26-30). Briffe et al. do not explicitly disclose a continuous and discrete cursor moving mechanism. However, Snyder et al. disclose a continuous cursor moving mechanism configured to move a cursor in a continuous

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manner on the display so as to designate a responsive object (see column 6, lines 38-52), and a discrete cursor moving mechanism configured to move a cursor in a discrete manner on the display, responsive object by responsive object, so as to designate a responsive object (see column 6, line 53 to column 7, line 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the cursor disclose in Briffe et al. in a continuous and discrete cursor moving mechanism for a pilot capable of selecting continuous or immediately a text or a graphic in a flight cockpit interface depend on each situation.

Also, as per claims 3 and 20, Snyder et al. disclose the first cursor control device includes a first activation mechanism configured to activate a function associated with the responsive object designated by the continuous cursor moving mechanism (see column 3, lines 8-18), and wherein the second cursor control device includes a second activation mechanism configured to activate a function associated with the responsive object designated by the discrete cursor moving mechanism (see column 3, lines 39-47).

As per claims 5 and 22, Briffe et al. do not explicitly disclose one window includes a plurality of windows. However, Snyder et al. disclose the at least one window includes a plurality of windows, and wherein the second cursor control device includes an auxiliary moving mechanism configured to move the cursor discretely from one window to another window in the plurality of windows (see column 4, lines 13-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining a plurality of windows for comparing and displaying many selection of graphical and textual of the flight plan at the same time.

As per claims 6 and 23, Briffe et al. do not explicitly disclose each window is divided into a plurality of fields and each window includes one default field. However, Snyder et al. disclose each window is divided into a plurality of fields each including at least one responsive object (see column 4, lines 13-31), and wherein each window includes one default field on which the cursor arrives after moving from one window to another window (see column 4, lines 32-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each window is divided into a plurality of fields and each window includes one default field in order to select an appropriate command for operating and modifying the flight plan.

As per claims 7 and 24, Briffe et al. do not disclose default responsive object. However, Snyder et al. disclose each default field includes one default responsive object (see column 4, lines 32-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each default field includes one default responsive object for placing the cursor in an appropriate section in the display for enter a selection in the screen.

Also, as per claims 8 and 25, Snyder et al. disclose the auxiliary moving mechanism is a Tab key on a keyboard (see column 4, lines 13-31).

As per claims 10 and 27, Briffe et al. disclose the second cursor control device includes a function operation mechanism configured to automatically move the cursor to a responsive object associated with the function operation mechanism (see column 10, line 58 to column 11, line 33).

As per claims 11 and 28, Briffe et al. disclose the function operation mechanism is a function key on a keyboard (see column 12, lines 1-8).

As per claims 12 and 29, Briffe et al. disclose the second cursor control device is a keyboard (see column 5, lines 26-30). Briffe et al. do not disclose the first cursor control device is a mouse. However, Snyder et al. disclose the first cursor control device is a mouse (see column 3, lines 10-11, from "Various.....to purpose"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining the first cursor control device is a mouse in order to select a desired object in the display.

As per claims 13 and 30, Briffe et al. do not explicitly disclose moves the cursor discretely in a cyclical manner. However, Snyder et al. disclose the second cursor control device moves the cursor discretely on the display, responsive object by responsive object, in a cyclical manner (see column 6, line 53 to column 7, line 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining the second cursor control device moves the cursor discretely on the display, in a cyclical manner for selection one by one object in different position in the display.

Also, as per claims 14 and 31, Briffe et al. do not explicitly disclose display changing mechanism. However, Snyder et al. disclose a plurality of displays (see figures 2-3), and wherein the first and second cursor control device respectively include first and second display changing mechanism configured to move the cursor from one display to another display in the plurality of displays (see the abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining the first

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and second display changing mechanism for continuously selection of information in the display or select only one by one object at different screen.

As per claims 15 and 32, Briffe et al. do not explicitly disclose each window is divided into a plurality of fields and each window includes one default field. However, Snyder et al. disclose the at least one window includes a plurality of windows, each window being divided into a plurality of fields including at least one responsive object (see column 4, lines 13-31), and wherein each display includes one default field situated on one of the plurality of windows, and on which the cursor arrives after moving from one display to another display (see column 4, lines 32-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each window is divided into a plurality of fields and each window includes one default field in order to select an appropriate command for operating and modifying the flight plan.

6. Claims 2 and 19, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141), and Snyder et al. (6,664,989) as applied to claims 1 and 18 above, and further in view of Houlberg (6,172,747).

As per claims 2 and 19, Snyder et al. disclose the continuous cursor moving mechanism is a control ball on a mouse (see column 3, lines 8-11, from "Cursor.....to purpose"). Briffe et al., and Snyder et al. do not disclose an arrow key on a keyboard. However, Houlberg discloses the discrete cursor moving mechanism is an arrow key on a keyboard (see column 11, lines 13-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. by combining discrete

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cursor moving mechanism is an arrow key on a keyboard to help the operator navigate up and down screen display with convenient and fast.

7. Claims 4,16-17,21, and 33-34, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141), and Snyder et al. (6,664,989) as applied to claims 3 and 14 above, and further in view of Snyder (6,381,519).

As per claims 4 and 21, Briffe et al. disclose the second activation mechanism is an Enter key on a keyboard (see column 5, lines 26-30). Briffe et al., and Snyder et al. ('989) do not disclose a key on a mouse. However, Snyder ('519) discloses the first activation mechanism is a key on a mouse (see column 3, lines 24-27, from "In an..... to cursor"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining a key on a mouse for selecting and editing data elements appearing on the display.

As per claims 16 and 33, Briffe et al. disclose the second display changing mechanism is a key on a keyboard (see column 5, lines 26-30). Briffe et al., and Snyder et al. ('989) do not disclose a key on a mouse. However, Snyder ('519) discloses the first display changing mechanism is a key on a mouse (see column 3, lines 24-27, from "In an..... to cursor"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining a key on a mouse for selecting and editing data elements appearing on the display.

As per claims 17 and 34, Briffe et al., and Snyder et al. ('989) do not disclose eight displays. However, it is obvious that one can design a display panel with plurality of displays. For example Snyder ('519) disclose in figure 3, and column 4, lines 32-65, four displays are



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included on an instrumental panel of a flight deck. Also, it is obvious that screen 302 (figure 3 of Snyder) is used by pilot, screen 308 is used by a copilot, and screen 304 and 306 can be common used by the pilot and copilot of the aircraft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining eight display screen for conveniently viewing and selecting user interface in the flight panel.

8. Claims 9 and 26, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141), and Snyder et al. (6,664,989) as applied to claim 1 above, and further in view of Beeks (6,104,969).

As per claims 9 and 26, Briffe et al., and Snyder et al. do not disclose the second cursor control device is activated during an emergency mode of the aircraft. However, Beeks discloses the second cursor control device is activated during an emergency mode of the aircraft (see the abstract; and column 2, line 44 to column 3, line 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. by combining the second cursor control device is activated during an emergency mode of the aircraft for immediately selection of a desired object in the display screen with a short time period during emergency without mistakes.

### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Muller et al. (6,072,473)

. Smith et al. (6,466,235)

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. Barber et al. (6,512,527)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner  
Dalena Tran

  
July 9, 2004